Perceptions and Attitudes Regarding Preparedness for Campus Crises:

A Focus Group Study of Undergraduates at a Southern University

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Abstract

Objective: To explore student perceptions and attitudes toward disaster preparedness and university readiness for various disasters in order to promote future development of effective strategies to change the culture of preparedness on campuses.

Methods: A total of 10 focus groups were conducted with 54 students. Participants completed general demographic information before discussing topics related to preparedness.

Results: Findings revealed complacency and lack of preparedness among students for many of the disaster types discussed. Participants reported feeling most prepared for pandemic outbreaks, citing various campus preparedness efforts, while they showed the least amount of confidence in their preparedness for incidents of violence. Participants also reported being relatively unprepared and unconcerned with respect to natural disasters.

Discussion: Despite a reported lack of preparedness for multiple emergency types, participants generated suggestions for increasing the preparedness of students on campus. Effective strategies could be utilized to better engage students and create a social climate encouraging preparedness on campuses. Findings, recommendations, and directions for research are discussed.

Keywords: preparedness, higher education, natural disasters, violence, disease, campus emergencies

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Recent natural disasters, particularly Hurricane Katrina (Fox et al., 2010; Schulenberg et al., 2008) and Hurricane Sandy (Powell et al., 2012; Redlener & Reilly, 2012), have prompted growing research on disaster preparedness. In addition, violent crises such as the Columbine shootings (Alba, 2011; Graham et al., 2006), the terrorist attacks of September 11, 2001 (Boscarino et al., 2003), and the Virginia Tech (Fox & Savage, 2009) and Delta State University shootings have stimulated an increase in research on preparedness for violent incidents. These events highlight the importance of preparing people for future crises in order to reduce injuries, fatalities, economic burden, and subsequent mental health problems. Despite increasing attention, disaster preparedness remains a low priority for many individuals, or a task they see as the responsibility of others (Paton, 2003). Research shows many individuals and communities remain complacent in preparedness efforts (Becker et al., 2013; Lovekamp & McMahon, 2011; Wachinger et al., 2013). With physical and emotional well-being, jobs, and education at stake, emergency preparedness research efforts are crucial for informing educational efforts and mitigating these harmful impacts.

College campuses are in particular need for increased emergency preparedness research, for several reasons. First, colleges are at particular risk for mass violence (Mitroff et al., 2006; O'Neill et al., 2008; Seo et al., 2012). Some researchers speculate this propensity for violence is due to the stressful climate and mental health strain associated with a college education (Bonnie et al., 2009; Levin & Madfis, 2009). In addition, colleges' sprawling campuses offer a unique environment that makes it difficult

to inform large numbers of individuals during a time of crisis, such as a natural disaster or an active shooter (Fox & Savage, 2009). Furthermore, given the large numbers of individuals in contact with each other within a centralized location, college students are particularly susceptible to health pandemics (Iuliano et al., 2009). Of additional concern, Lovekamp and McMahon (2011) found college students to be unprepared for natural disasters, typically depending on authority figures for appropriate response actions. Students' lack of preparedness for campus emergencies, along with higher education institutions' increased risk for violence and disease pandemics, as well as the occurrence and potential threat of natural disasters, demonstrates the need for better preparedness efforts on college campuses.

At higher education institutions, emergency preparedness training often receives little funding, support, or attention compared to other programs (Mitroff et al., 2006). Even when administrators have emergency preparedness guidelines in place, students often are not aware of them or do not understand them enough to comply (Lovekamp & McMahon, 2011; Seo et al., 2012). Universities putting forth funding and effort to increase emergency preparedness tend to focus only on frequently occurring or recent disasters (Martel & Mueller, 2011). Plans that result from these efforts may be useful, but they often lack proper implementation and distribution (Mitroff et al., 2006). To better communicate plans to students, more knowledge must be generated and disseminated as to what factors impact complacent attitudes. Students must also become more motivated to engage with preparedness efforts. To do this, a social climate for preparedness must be instilled among the leaders of the campus to change wider student attitudes. In addition to changing attitudes to facilitate a more proactive stance on the part of the individual,

developing public policy initiatives in the areas of crisis management and disaster preparedness can help make college campuses more prepared and increasingly resilient, mitigating the losses resulting from such events.

Natural Disasters

Negative Impacts of Natural Disasters. Natural disasters' negative impacts may be mitigated by proper preparedness efforts. Natural disasters, such as hurricanes, tornadoes, earthquakes, blizzards, and other environmental catastrophes, can have a tremendous impact on individuals in affected areas. This impact can harm public health (Powell et al., 2012; Redlener & Reilly, 2012), emotional well-being (Adeola & Picou, 2014; Fox et al., 2010; Schulenberg, 2008), and the economy of the region (Baade et al., 2007). Hurricane Katrina, the most expensive natural disaster in recent history, resulted in millions of dollars of destruction to community infrastructures, as well as the loss of lives, homes, and livelihoods for many people (U.S. Department of Commerce, 2006). Such devastating loss can result in psychological injury to those involved, including symptoms of depression, anxiety, and post-traumatic stress (Adeola & Picou, 2014; Hirschel & Schulenberg, 2009). Similarly, Hurricane Sandy severely affected public health, as hospitals were overrun with survivors of the storm (Powell et al., 2012; Redlener & Reilly, 2012). With such far-reaching consequences, preparedness for natural disasters must be a priority.

Natural disasters have a profound impact on the lives of students, affecting their academics, social relationships, and mental health (Lemieux et al., 2010; Watson et al., 2011). These findings suggest a wide range of impacts for students coping in the immediate wake of a natural disaster. However, natural disasters also have long-term

consequences. Lemieux et al. (2010) surveyed undergraduate social work students and found almost half (47%) met criteria for depression following Hurricanes Katrina and Rita. In addition, substance abuse and posttraumatic stress disorder risk were heightened (Lemieux et al., 2010). However, despite the widespread and potentially long-lasting nature of these impacts, students are largely unprepared for these events. Research is needed to assess student attitudes and perceptions in order to determine ways to change complacent attitudes and better prepare them for natural disasters. Such efforts are essential to reducing negative outcomes.

Natural Disaster Preparedness. Disaster preparedness involves a series of processes, both physical and mental, that together "reduce the risk of injury and damage… and facilitate[s] a capability for coping with temporary disruption associated with hazard activity" (Paton, 2003, p. 210). Disaster preparedness involves gathering resources, preparing a plan in the event of a crisis, and practicing that plan (Becker et al., 2013; Mitroff et al., 2006). While there is a growing literature on natural disaster preparedness, the current research has several limitations. Many studies involving disaster preparedness occur following a disaster and take a retrospective look at what should have been done, or examine how the disaster changed perceptions and preparedness efforts (Becker et al., 2013; Lovekamp & McMahon, 2011; Powell et al., 2012; Redlener & Reilly, 2012). These studies' findings are limited because they show fear and preparedness efforts tend to peak following a disaster but wane soon thereafter. Another common limitation of disaster preparedness studies is they examine only one type of disaster (Becker et al., 2013; Powell et al., 2012; Redlener & Reilly, 2012; Wachinger et al., 2013). Studying a particular disaster helps to determine the impacts

such events can have, but these studies are unable to show accurate perceptions of risk prior to the disaster. Furthermore, while research has shown a prevalence of complacent attitudes (Lovekamp & McMahon, 2011) and a lack of personal responsibility for preparedness (Paton, 2003), not enough is known regarding ways to change those attitudes to increase preparedness. With these limitations in mind, additional research must have the goal of accurately determining perceptions and increasing motivation to prepare.

Student Preparedness for Natural Disasters. College students represent a particularly vulnerable population in the event of a natural disaster due to several factors. First, college students share a lack of preparedness, including possessing few critical resources (e.g., emergency food supply, flashlights, etc.) and having little knowledge of appropriate plans of action (Lovekamp & McMahon, 2011; Piotrowski, 2015; Senkbeil & Schneider, 2010). In addition, college students often perceive little risk of natural disasters or believe the impact of such a disaster would be minor (Simms et al., 2013). Moreover, Simms (2013) found one in five students chose not to sign up for emergency text messages, and fewer than one in ten (8%) had plans in the event of a hurricane. For these reasons, college students represent a unique population in regards to natural disaster preparedness, and as a result, warrant additional study.

Incidents of Mass Violence

Negative Impacts of Mass Violence. Mass violence includes events like mass shootings and domestic terrorism. In recent years, many lives have been lost in events like the September 11th, 2001 terrorist attacks (Boscarino et al., 2003), the Boston Marathon bombings (Holman et al., 2014), and the 2007 Virginia Tech mass shooting

(Bonnie et al., 2009; Fox & Savage, 2009). These events have impacted individuals and communities, highlighting the importance of awareness and the need for increased attention to preparedness efforts. Incidents of violence not only have a potential physical impact, they have the potential to affect mental health as well. Some affected individuals experience a range of psychological impacts, including acute stress (Holman et al., 2014), depression (North et al., 2002), and fear (Boscarino et al., 2003).

One example of an incident of mass violence that has become of increasing concern in recent years is that of the active shooter. Such instances are sometimes referred to as mass shootings. Mass shootings have harmful impacts on survivors and victims' families. North et al. (2002) found that three years after a mass shooting, almost one in five (18%) survivors continued to meet diagnostic criteria for posttraumatic stress disorder (PTSD). Some research (Green & Lindy, 1994; Norris et al., 2002) suggests that, while initial rates of PTSD are similar in survivors of natural disasters and mass violence events, mass violence results in longer-lasting impairment compared to natural disasters. These types of impacts deserve the attention of researchers to inform decisions about best policies and plans in the event such an incident occurs. Effective and well-implemented policies and plans will help to mitigate the impact of the event, with potential to facilitate resilience and possibly posttraumatic growth in those affected.

Preparedness and Incidents of Mass Violence. To reduce deleterious results associated with incidents of mass violence, preparedness is crucial; institutions and communities must implement, distribute, and practice plans for these crises. Like natural disasters, acts of terrorism and mass violence are largely uncontrollable. Acts of mass violence often occur without warning, and because of this, preparedness must be a

continual effort and a persistent practice for individuals, institutions, and communities who may be affected.

Acts of terrorism is a relatively new area of preparedness research in the United States; the September 11, 2001 attacks prompted research on the impacts of such an event, coupled with increased concern about future attacks (Boscarino et al., 2003; Pyszczynski et al., 2002). This research resulted in increased knowledge for how to prepare for such an event. For instance, the impact of increased preparedness efforts was seen in the swift response of emergency workers at the Boston Marathon bombings; the community's preparedness efforts resulted in fewer lost lives and served as a model for future efforts (Walls & Zinner, 2013). Preparedness for mass shootings is equally important. However, preparedness efforts in this area are lacking at many secondary schools. Many do not conduct student trainings, and students are often unaware of emergency guidelines (Graham et al., 2006; Smith et al., 2001). These findings are concerning with respect to student safety.

Incidents of Mass Violence and Student Preparedness. College students seem equally unprepared for acts of terrorism and mass violence on their campuses. Despite most colleges having plans in place for such events, Seo et al. (2012) found only a quarter of higher education administrators believe students understand their school's emergency procedures. Focus group research revealed that many students were unsure where they would go if advised to seek shelter off campus due to an on-campus threat (McGee & Gow, 2012). This uncertainty suggests a lack of preparedness. In addition, many students reported not reading emergency text messages immediately, due to being in class or otherwise occupied (McGee & Gow, 2012). This represents a problem, as immediate

notification of students is necessary in an emergency to reduce the potential for loss of life. Lack of preparedness among students suggests a need for increasing awareness, knowledge of emergency plans, and training programs to ensure that the material is learned and practiced. Such methods will increase student confidence in the event of a crisis.

Disease Pandemics

Negative Impacts of Disease Pandemics. Pandemics are widespread infectious disease outbreaks. Recent pandemics include the "swine flu" (H1N1) outbreak in 2009 (Iuliano et al., 2009), the "avian flu" (H5N1) outbreak in 2011 (Rudisill et al., 2012), and the severe acute respiratory syndrome (SARS) outbreak in 2003 (Maunder et al., 2003). Similar to natural disasters and incidents of mass violence, pandemics increase levels of fear and result in avoidance behaviors (Lau et al., 2010; Rosoff et al., 2012). Lau et al. (2010) found over three-quarters (76.5%) of a community sample in Hong Kong engaged in avoidance behaviors, such as not leaving their homes or travelling to crowded areas. They also reported that impaired daily life functioning was associated with a lack of knowledge and preparedness. These types of outcomes impair the lives of many individuals; because of the potential for harmful impacts to physical and psychological well-being, efforts must be prioritized to prepare communities and enhance knowledge prior to the occurrence of an outbreak.

Pandemic Preparedness. Preparedness for pandemics has come under scrutiny in recent years due to concern over outbreaks such as those caused by the severe acute respiratory syndrome (SARS) and the H1N1 influenza virus (Gostin, 2009). Problems exist within health care agencies for detecting potential pandemic emergencies at the

earliest possible point (Gostin, 2009). Pandemics require coordination between various agencies for tracking and prevention. Such coordination requires prior preparedness (Moghadas et al., 2009). Action must be immediate to prevent a global pandemic, and the range of viral strands complicates efforts. Furthermore, a survey of health department workers found that only 53% would report to work during an influenza outbreak (Balicer et al., 2006). This finding is troubling due to the crucial role health workers have in informing and guiding the public, providing testing and vaccination, and reporting cases to health organizations (Balicer et al., 2006). In addition, only a third of the workers described themselves as knowledgeable about the impact of influenza pandemics on public health (Balicer et al., 2006). Efforts are needed to increase knowledge among healthcare workers and enhance feelings of confidence in informing the public. Moreover, training drills and simulations increase communication between departments, preparing individuals for pressures associated with a real-time pandemic (Moghadas et al., 2009).

Student Preparedness for Disease Pandemic. College students appear to be unprepared for a disease outbreak. Recent research has found that students are not only unprepared for a pandemic, but they are even noncompliant with directives designed for their health and safety. For example, Mitchell et al. (2014) found students did not comply with university recommendations regarding an influenza outbreak, believing the university was overreacting. In addition to not adhering to university directives, many students displayed cavalier attitudes towards their risk of infection (Mitchell et al., 2014). However, students did cite the university as their number one source of information regarding the outbreak, showcasing the need for effective plans, but many students

reported not receiving effective communication from faculty, with only 58% of students reporting being told by professors to not come to class when experiencing a fever (Wilson & Huttlinger, 2010). Of additional concern, Decker and Slawson (2012) found that many students expressed fear but still did not prepare appropriately for future outbreaks by getting an influenza vaccination. These findings reveal the need for more effective communication of preparedness plans to students, as well as the need to emphasize increased awareness, knowledge, and motivation for complying with institutional directives designed with health and safety in mind.

Summary

Prior research conclusively shows that college students do not prioritize preparedness in any of the three disaster areas (violence, pandemic, or natural disaster). However, research has shown us differences between the disaster types. For example, Mitchell et al. (2014) found that students thought that a pandemic would not likely be serious. Simms et al. (2013) found similar findings when studying students' perceptions of risk for a natural disaster, while research has shown that students are, in fact, fearful of a violent event (Boscarino et al., 2003), but simply do not know what measures to take to prepare. In order to change students' fear and complacency to action, administrators at universities must know how to target students most effectively and create a social culture on campus where preparedness becomes valued and respected. To do this, students must provide information on the current culture that surrounds preparedness and inform decisions about how to change this culture.

The Current Study

This study was conducted to explore the culture of disaster preparedness on the campus of a university located in the southern United States. The study's purpose was to inform effective policies and training for preparedness efforts at universities by targeting the cultural climate that undervalues preparedness. Prior to the current study, an initial pilot survey assessed student beliefs about likelihood of disasters, attitudes toward preparedness, and perceptions of preparedness for a number of disasters (Baczwaski et al., 2013). In an effort to identify prevalent student opinions and areas in which students express confidence and concern, the previous pilot survey was supplemented with qualitative data obtained via focus groups. The current study builds on previous findings with the intention of informing preparedness efforts via knowledge of student perceptions and needs in relation to a variety of disasters. Because of the exploratory nature of this study, no hypotheses were generated beforehand. Focus group discussions involved prior experience with disasters, training expectancies, and perceptions of disaster readiness as a means of facilitating understanding and informing directions for preparedness initiatives.

Methods

Participants

Fifty-four students from a medium-sized university located in the southern United States participated in this focus group study. Focus groups represented the most effective means of ascertaining the cultural climate of preparedness on campus as they allowed for open conversation between students about their experiences and perceptions of preparedness. Students were recruited for participation from undergraduate psychology courses and from a central location on campus. Participants were given snacks and drinks

for their participation in the focus groups. Females comprised about three-quarters of the sample (74.1%, *n* = 40). One participant was a graduate student and all other students (*n* = 53) were undergraduates. Students ranged in age from 17 to 61 years (*M* age = 22.08, *SD* age = 9.20). Of the participants who identified their race/ethnicity (*n* = 53), the majority (*n* = 38; 70.4%) were White, with some participants identifying as Black (*n* = 10; 18.5%), Hispanic/Latino (*n* = 2; 3.7%), Asian (*n* = 2; 3.7%), and Native American Indian (*n* = 1; 1.9%). Of the sample, 55.6% (*n* = 30) were freshmen, 11.1% (*n* = 6) were sophomores, 18.5% (*n* = 10) were juniors, 13% (*n* = 7) were seniors, and 1.9% (*n* = 1) were post-baccalaureate. Approximately half (51.9%; *n* = 28) of the participants were in-state students, and more than a quarter (27.8%; *n* = 15) of the sample reported being a psychology major.

Measures

Demographics & Disaster Knowledge/Experience. A brief self-report questionnaire included demographic questions on participants' sex, age, race/ethnicity, living arrangement (on-campus/off-campus), academic classification, international student classification, academic major, state of residence, and area of state residence (coastal or inland). In addition to the basic demographics, students responded to two questions designed to assess their history with and knowledge about disasters prior to attending the focus group discussion. Students were asked, "When you think about disaster preparedness, what comes to mind"? Students were also asked to indicate any major disasters they had experienced and to describe the nature of the incident. Major disasters listed on the questionnaire included natural disasters, man-made disasters, school shootings, terrorist attacks, and pandemics. Thus, students' prior experiences with

disasters were assessed qualitatively, along with attitudes and perceptions as to disaster preparedness, prior to participating in the focus group discussion. Focus groups were organized into three different types of themes, namely natural disasters, incidents of mass violence and pandemics, and reactions to the initial pilot survey results.

Natural Disaster Focus Groups. For the focus groups that discussed natural disasters, a moderator first alerted participants they would be discussing natural disasters and gave examples of the kinds of events included in the category. Examples included tornadoes, hurricanes, earthquakes, fires, and blizzards/ice storms. A set of basic questions was devised to facilitate discussion of the topic (see Appendix A). Following responses to these questions, participants posed and discussed additional topics that emerged from the interaction.

The first topic participants discussed was motivation for being concerned about or prepared for natural disasters. Students were further asked about barriers to preparedness. One question from the self-report questionnaire was asked aloud by the focus group moderator: "When you think about disaster preparedness, what comes to mind?" In order to assess student perceptions of the value of disaster preparedness, they were asked, "When you think about a person who is concerned with/thinking about disaster preparedness, what types of qualities or characteristics do you think he or she has?" To prompt discussion of barriers inhibiting students from becoming more prepared, participants were asked, "When you think about students who are not concerned with/thinking about disaster preparedness, what qualities or characteristics are keeping them from preparing?" Follow-up questions gave students the opportunity to provide suggestions on ways to involve unmotivated students in disaster preparedness efforts.

Next, focus group participants discussed possible training avenues the university might employ to inform students of natural-disaster-related information. To determine appropriate methods for communicating emergency information to students, the moderator asked, “What do you think are some good ways of delivering information about impending disasters?” and “How should messages be worded?” To determine the most effective sources for communicating this information, students were asked, “Who should deliver messages [about impending disasters]?”

The final category of discussion questions posed to student focus group participants assessed their perception of the university’s own preparedness for natural disasters. To assess perceptions of personal and institutional responsibility in the event of a natural disaster, students were asked to describe the role they felt the university had in the event of a natural disaster and the role they thought they themselves had in such an event. Participants then discussed ways in which the university could work to raise awareness about disaster preparedness and what elements a class or training program would need in order to be effective. In an effort to determine perceptions of current institutional levels of disaster preparedness, the moderator posed the question, “What steps is the university taking to better prepare for disasters?” Finally, students prioritized a list of steps the university could take in the future to better serve students in disaster preparedness efforts. Steps included tasks like, “hand out informational flyers in front of the student union”, “show videos on what to do in a disaster situation”, and “conduct frequent, mandatory weather drills”. After discussing these topics, students were given the opportunity to pose questions of their own or give any comments or concerns, either about the focus group or natural disasters more generally.

Incidents of Mass Violence and Pandemic Focus Groups. Focus groups on incidents of mass violence and pandemic campus emergencies considered events such as a school shooting (i.e., an active shooter on campus), a bomb threat, a terrorist attack, or a health-related pandemic. The structure of the discussions largely followed the same format as the natural disasters focus group. To ascertain current levels of awareness and risk perception among students, the moderator asked participants, "Are students thinking about disaster preparedness, and if so, to what degree?"To determine barriers students perceived to being concerned or prepared for an incident of mass violence or a pandemic emergency, they were asked, "When you think about a person who is [not] concerned with/thinking about disaster preparedness, what types of qualities or characteristics do you think he or she has?" The next discussion topic for the group was formatted in the same way as the natural disasters focus groups and concerned the students' prior training experience and expectancies for training events/messages on campus. To foster discussion of this topic, students were asked "What do you think are some good ways of delivering information about impending disasters?"

To promote dialogue on perceptions of the university's readiness for a pandemic or incident of mass violence, students answered these and other questions: "What steps is the university taking to better prepare for disasters?" and "How can we raise awareness of the importance of disaster preparedness at the university?" Additionally, students in these focus groups were asked whether they had viewed a recent video made by the university concerning what to do in the event of an active shooter on campus. Following this question, the effectiveness of the video was assessed with respect to those who watched it by asking, "What did you think about [the video]?" Students again ranked a list of steps

the university should take to increase awareness and preparedness on campus. Students in these focus groups were also given the chance to voice concerns, comments, or questions related to the topic they had discussed or the focus group more specifically. See Appendix B for the moderator script used in the session.

Focus Groups: Reactions to Pilot Survey Results. The goal of the third type of focus group was to allow students to give their opinions on the results of a prior pilot study assessing student attitudes towards natural disasters and incidents of mass violence on campus (Baczwaski et al., 2013). In these focus groups, research assistants presented the results from the pilot survey, focusing on such areas as students' lack of preparedness, low levels of perceived risk, and reliance on faculty for guidance in emergency situations. Following the presentation of the results, students were asked, "Were any of the results surprising? What did you find surprising? Why did the results surprise you?" Students addressed any confusion about the questions or results and suggested improvements for the pilot survey prior to dissemination campus-wide. Next, in order to prompt discussion of potential barriers to students' disaster preparedness efforts, the moderator asked questions such as, "Why do you think students in general are not very concerned about the occurrence of disaster situations?" and "For those students who are not concerned with/thinking about disaster preparedness, what would make them more interested/engaged in disaster preparedness?"

Following the questions related to the pilot survey results, participants discussed future training possibilities and avenues for the university to better inform students about disasters. This section of the discussion followed the same script used during the natural disasters and incidents of mass violence and pandemic emergency focus groups. Finally,

students provided any comments, concerns, or questions about either the pilot survey results or the focus group experience more generally. See Appendix C for the moderator script for these sessions.

Procedure

Students were recruited from a central location on campus using flyers and other informational aids; in addition, students from an undergraduate, senior-level psychology course were also recruited. Students received extra credit for participation. Recruitment occurred during the early to middle portions of the 2013 spring academic semester. Each focus group consisted of one to nine students discussing one of three disaster preparedness topics: (1) natural disaster preparedness, (2) on-campus preparedness relating to incidents of mass violence and pandemic, and (3) the results of the initial pilot survey. A total of 10 focus group sessions were conducted, with four (n = 20) dedicated to natural disaster preparedness, two (n = 16) dedicated to incidents of mass violence and pandemic, and four (n = 18) dedicated to discussing the findings from the initial pilot survey. Focus groups took place in February and March 2013. Each focus group session lasted approximately an hour and a half.

Focus groups took place in a conference room on the university campus. Upon entering the room, informed consent was obtained. After students consented to participate, they completed the basic demographic questionnaire. The group discussion then began. Two graduate research assistants were involved in helping to administer and monitor each focus group session. One research assistant moderated the discussion, leading the group and asking relevant, probing questions about the material covered. The second research assistant took notes and managed an audio recording of the session for

subsequent coding. Students were given ground rules for the conversation before the preparedness questions were posed. They were asked to participate in the discussion, but to not dominate the conversation so as to allow others an opportunity to voice their opinions. Students were also asked to respect the opinions of other participants, even if they disagreed with the other student's ideas or opinions. Throughout the session, students were supplied with snacks and drinks. At the conclusion of the session, students were thanked for their participation and given the opportunity to ask questions. The university's Institutional Review Board approved the study protocol and procedures.

Data Reduction and Analysis

First, research assistants transcribed focus group discussions by listening to the audio recordings. Research assistants excluded information not relevant to the topic of the focus group. Subsequently, four research assistants developed broad themes using the Constant Comparative Method (Glaser & Strauss, 1967). This method involves using the first few quotes to develop general categories, then comparing each subsequent quote to the previous quotes included within that category. After several quotes are added to a general category, the theme is titled, and criteria are defined for inclusion of subsequent quotes. Inter-rater reliability of the coders was reviewed to ensure appropriate inclusion within themes and their sub-categories. Finally, the frequency of discussion for each category and sub-category was calculated, overall and by participant.

Results

Upon completion of the coding process (see Data Analysis), seven general themes emerged. These themes, presented in order of frequency discussed, were: (1) Delivery of Information, (2) Raising Awareness, (3) Attitudes Toward Preparedness, (4) Relevance

of Emergencies, (5) Importance of Preparedness, (6) Ways to Prepare, and (7) Role of Institution vs. Student in Preparedness Efforts. Research assistants coded 867 distinct quotes into these seven general themes. Themes most frequently discussed were Role of the Institution vs. Student (37.8% of quotes), Attitudes Toward Preparedness (20.4% of quotes), and Raising Awareness (19.5% of quotes).

Role of Institution vs. Student

The Role of Institution vs. Student theme was defined as discussion of the responsibility of the university and/or the students when preparing for and responding to emergencies. Perceptions of the university's preparedness and steps that could be taken to improve the university's preparedness were also included in this theme. This theme garnered the most conversation time, with 37.8% of quotes covering the topic. Furthermore, 96.3% of students spoke on the university's or students' roles during the focus group sessions. Students tended to hold the view that the university should inform students about impending disasters and provide instructions for how best to respond. Similarly, most students expressed the opinion they were only responsible for complying with procedures. For example, one student said, "If the school makes us aware of it, then it would be our part when it came to actually do what they said… I do think it's largely the school though." However, some students believed that individuals are ultimately responsible for their own preparedness:

> I think it's up to individual[s] whether or not they… want to be prepared. You can give them all the requirements, but if they're in denial that there is nothing that's going to happen to them, they're never going to learn because it's up to the individual to get their own mind set.

While most students thought they should be listening to authority figures in the event of an emergency, they often perceived professors as unprepared for an emergency, or indicated their instructors were more concerned with class than with safety. One student described this, saying, “A lot of times, our teachers definitely care more about us paying attention than our safety.” Another student agreed, recalling a recent classroom situation involving a fire alarm:

> I feel the university is very concerned about educating students [about preparedness], and they need to be more concerned about educating professors and staff and making sure they carry [those plans] out. There's a girl I'm friends with who said… the fire alarm started going off…and her teacher said, "what do we do?" You [the professor] are the one in charge, you should be telling us to get out of here. She said they just… kept teaching. What is a kid going to do? Get up and walk out?

Students acknowledged the university’s current efforts at informing and preparing them, but many still agreed more should be done, including sending warnings and school closure information earlier. Students also agreed that utilizing popular people on campus for preparedness campaigns could improve the university’s efforts.

Attitudes Toward Preparedness

The Attitudes Toward Preparedness theme was defined as discussion of topics of implied attitudes or perceptions about disaster preparedness, characteristics of people who are or are not prepared, reasons for complacency in preparedness efforts, and participants’ opinions about disaster preparedness. Students frequently discussed their attitudes toward preparedness; approximately one-fifth of quotes (20.4%) taken from the

focus groups concerned students' attitudes, and 96% of students brought the topic up at some point in the discussion. Students tended to have nonchalant attitudes about preparedness and agreed that their focus tended to be elsewhere. For example, one student stated, "There's too much else to think about, like classes, social life; there's too much to think about [rather than] something that may or may not happen."
Another said, "I think a lot of people think, 'oh that will never happen to me,' so they are just kind of oblivious." Many students also held negative opinions about individuals who are prepared for disasters, describing these individuals as paranoid or overly careful. For example, one student expressed, "[People concerned with disaster preparedness are] paranoid a little… I find that my concerns are more about my future. I don't tend to worry about… matters like that, or about other people, it's all about me at the moment."
Most students could identify with students who are not prepared for disasters, saying,

> They're all worried about material things: their papers, or their work, and their job, which would be me. I'm not worried about me having to go sit in a basement because something's going to happen to me. I'm more worried about, okay I need to pay my bills, I need to write this paper.

This focus on school at the expense of disaster preparedness was a common perspective expressed in the focus groups. Students did agree that those who were prepared had certain positive skills, like leadership and conscientiousness. They seemed to admire these qualities, but few students aligned themselves with these descriptions, instead talking about themselves as unprepared.

Raising Awareness

The Raising Awareness theme was defined as discussion surrounding barriers and motivations for students to be concerned and prepared, as well as techniques to convey information about what to do in the event of a disaster (i.e., good and bad techniques). Raising Awareness comprised 19.5% of conversation time within the focus groups. Of the participants, 83.3% (n = 45) discussed this topic. This topic tended to involve student opinions on posters, flyers, and emails related to disasters and disaster preparedness. Most students agreed emails were the least favored method for raising awareness; one student stated, "They send text messages, and I would read them, but if they had sent them in emails, I would not have known [about a disaster]." Another student echoed this view, saying, "A good way to not do it is sending emails, because when I see them, I will be honest, I delete them almost immediately." On the other hand, students' opinions varied concerning the use of posters in campus buildings and handing out informational flyers. Students typically preferred the use of posters to flyers, agreeing that flyers tended to be tossed before being read. Some students said that they read posters in buildings, while others ignored them. However, students overwhelmingly supported the use of text messages to inform them about disasters or disaster preparedness efforts. One student stated, "Everybody's always on their phone, everybody, and so if you can get to somebody's phone, you've got their attention, because as soon as my cell phone buzzes I'm looking at it."

Delivery of Information

The Delivery of Information theme was defined as discussion of suggested methods for trainings, techniques for conveying information about what to do in the event of a disaster, and awareness of safety/preparedness measures the campus is

implementing. Unlike discussion of posters, emails, and other awareness techniques categorized under Raising Awareness, preparedness efforts categorized as Delivery of Information involved a time commitment on the part of students (e.g., training programs). Participants also discussed who should be delivering information to students about preparedness. Delivery of Information comprised 16.5% of conversation time. Slightly over three-quarters (77.8%; $n = 42$) of participants brought this topic up in the focus groups. Participants expressed high levels of trust and respect for community assistants and other student leaders, suggesting these individuals should be the ones delivering information about emergency preparedness.

Most participants felt that efforts to deliver information to students about disaster preparedness should be interactive and student-focused. For example, one student remarked, "If there is a class on it, with someone just lecturing, I probably would be on my phone, but if it's more a hands-on situation where you actually get up and participate, then it will be more effective." Another student agreed that training was important for student preparedness: "Physical participation is that next level that it's going to have that impression on you more than reading and more than listening." Although most students preferred interactive learning processes, a few students thought mandatory classes or online quizzes covering disaster preparedness were a feasible route. One student expressing this opinion stated, "Maybe something in the… class for freshman; not all freshman took them, but most of them [did]…it is a small group setting so it can be more practical." However, the idea of additional mandatory classes or online quizzes frustrated many of those in the focus groups; the large majority of students preferred a learning method involving interaction or simulation of disasters.

Relevance of Disasters

The Relevance of Disasters theme was defined as discussion of perceptions of the likelihood that a disaster would impact students, as well as knowledge about disasters in relation to how commonly they occurred. Students spoke somewhat infrequently about the relevance of disasters in their own lives. Only 4.4 percent of quotes fell under this theme, and only about one-third of students (37%) brought up the relevance of disasters. Those students who spoke on the topic generally described having a sense of safety at the university that made disasters on campus seem improbable. For example, one student said, "It's just a little happiness bubble. You don't really have to worry about natural disasters here." Another student who shared this perception of safety said, "You go about each day thinking about how this school is the safest school… You wouldn't think something would happen." Students also discussed reasons other areas or universities might have problems with violence or natural disasters, but they perceived their school as being at a safe distance from these tragedies, such that they did not perceive disaster preparedness as a high priority.

Ways to Prepare

The Ways to Prepare theme was defined as discussion of how students know what to do in the event of a disaster. Students rarely discussed this theme. Only 1.2% of discussion was on this theme and only 16.7% of students ($n = 9$) broached the topic. Students' conversations on the topic tended to involve a sense of uncertainty. Some students discussed learning about ways to prepare from parents or teachers. One student discussed the impact family planning had had for her, saying, "We [my family] would practice going to a room without any windows and what we do is fill up the bathtub with

water in case there was a water shortage [due to an outage].” Another student talked about the role of videos and training at lower levels of education: “Those videos that they make you watch in elementary school [show you how to prepare].” Most students did not have such specific examples, however, and spoke in general terms of what they knew about preparedness. Furthermore, almost all of the students’ ways of knowing how to prepare involved relying on authority figures for guidance, showing the crucial role that institutions have in informing students.

Importance of Preparedness

The Importance of Preparedness theme was defined as discussion of materials to have in order to be prepared for an emergency, factors influencing students’ inclination to read about crisis events or heed warnings, and information participants knew about what to do in response to emergencies. In line with students’ sense of safety, they rarely discussed the importance of disaster preparedness; fewer than 3.7% of students ($n = 2$) raised the topic in the focus group sessions, and the topic accounted for only 0.2% of total discussion. Students who discussed the topic focused on the importance of having materials and a plan in place for immediate action in the event of a disaster. For example, one student said, “I always have a flashlight with me… not specifically for a tornado or a certain disaster, but just in case.”

Discussion

This study aimed to gather information about college student attitudes and experiences with respect to disaster preparedness (their own preparedness as well as the preparedness of the university). Barriers to students’ motivations for preparedness were explored, and students’ suggestions for how to improve preparedness efforts on college

campuses by changing the cultural climate of preparedness were obtained. By determining what factors stand in the way of increased levels of student preparedness for emergencies, efforts can target these barriers and work to eliminate or reduce them. In addition, the use of student suggestions may help make emergency preparedness more appealing. The aims of this study were largely accomplished, as students provided valuable suggestions for policies and training programs on campus, discussed why preparedness is not a priority for many students, offered ideas as to how to motivate students with respect to disaster preparedness, and expressed their perceptions regarding the university's preparedness.

Our study corroborated previous research regarding the complacency and lack of preparedness among college students (Lovekamp & McMahon, 2011; Seo et al., 2012). Students tended to perceive the university as a place of safety removed from the possibility of a disaster. While a sense of safety is beneficial as it reduces avoidance behaviors such as students not leaving their dormitories at night or not walking alone on campus (Ratti, 2010), it may also contribute to complacent attitudes toward preparedness. If students have an overly strong sense of safety, such that they do not believe or consider the possibility of a disaster occurring and directly affecting them, then preparedness efforts may make little sense to them. In line with this thinking, the majority of students involved in the current study did not prioritize preparedness, saying other responsibilities and activities seemed more important. Students tended to prioritize their classes and social lives over preparedness, with preparedness being something that did not often enter their minds.

In addition, participants had little knowledge about what to do in the event of an emergency, and most said they did not have access to emergency materials. However, students expressed little fear of pandemics, such as a flu outbreak, and seemed confident in their ability to prepare for this type of disaster, a finding that differed from some prior research suggesting student incompetence in this area of preparedness as well (Decker & Slawson, 2012). Students generally reported that university efforts in this area were sufficient, noting various signs and posters they had seen preparing them to deal with influenza pandemic. Students were most fearful of incidents of violence on campus, though they reported being uncertain about their plans in the event of a natural disaster as well. This, too, is in line with prior research (Simms et al. (2013; Boscarino et al., 2003). In regards to a natural disaster, many students' prior experiences with these events left them with the viewpoint that natural disasters would not severely impact them and therefore, preparedness for these events was not a high priority. Alternatively, despite most students' lack of experience with incidents of mass violence, such as the case of an active shooter or a domestic terrorist attack, students were fearful of these events. Despite this, students did not have plans in place for these events. Instead, students largely reported perceiving themselves as having a secondary role in preparedness, relying on authority figures to provide guidance in the event of an emergency. Most students described themselves as having a compliant role, thinking they should merely do as the university says rather than actively preparing themselves.

Despite students' general lack of preparedness, the focus group discussions allowed for the opportunity to generate ideas to improve levels of preparedness. Students provided useful suggestions to increase awareness and accessibility of emergency

preparedness. Some valuable suggestions included active shooter trainings, use of simulations for fires, and use of the campus-wide PA system to broadcast directions in the event of an emergency. Trainings, simulations, and announcements can be used to create more effective programs that will reach larger groups of students and enhance students' confidence in their preparedness for emergencies. Students also suggested using popular campus personalities to appeal to them about preparedness efforts and change the cultural climate that associates preparedness with paranoia. Because students have high levels of trust and respect for these popular individuals, they saw themselves as more likely to listen to them instead of an instructor or an administrator. Students' suggestions will help to inform potential programs, enhancing the likelihood that they will be appealing and increasingly effective at raising levels of preparedness. By motivating students to become involved in preparedness efforts using strategies they enjoy and faces they recognize, a climate can be facilitated on campus whereby preparedness becomes socially encouraged.

Implications

The findings of this study suggest that methods of informing and preparing students for a disaster must change. Preparedness efforts at universities should not strictly involve laying out a set of rules for students to follow. In order for students to attend to and remember information, preparedness programs should be appealing to students and involve higher levels of interaction with the material. Students described such interactive and student-focused programs as the most appealing, while they discouraged lectures and courses. For example, fire simulations for community assistants of student dormitories are interactive trainings that could result in greater preparedness in the event of an actual

fire. Because participants trust and respect student leaders, their preparedness is essential in order to direct and lead others to safety. In addition, freshman orientation programs could include preparedness simulations or trainings to relay information to students. Students also suggested the need for increased preparedness efforts in areas like natural disasters and incidents of mass violence, topics about which students are more fearful and unsure. As students reported being the least prepared for incidents of mass violence, these kinds of events would likely be an effective starting point for programs.

Training programs should be better designed, and emergency plans better distributed, in order to increase student awareness and confidence in the event of a campus emergency. Because students prefer the use of text messages to other forms of communication like emails and flyers, information should be distributed via text message when at all possible. Similarly, student leaders and popular campus personalities, such as athletes and coaches, could be used in campaigning to increase motivation and participation among students. Students reported that they admire these individuals and respect their opinions, seeing them as more similar to themselves than administrators and professors, who students expressed less identification with. Prior research did not include suggestions for who should be distributing information about preparedness to students on campus; this research suggests that those involved in distribution of information play an essential role and are valued if they are seen as likable and similar to the students. The use of appealing and interactive methods for trainings and distribution of plans and warnings will help ensure that students have access to the information, as well as understand and act on the information in a proactive manner.

While students pointed to the importance of the university in informing and guiding them during a time of emergency, the university is not alone in this role. Students must take a more active role in their own preparedness. Students would benefit from actively participating in university efforts and encouraging other students to do so as well. When university trainings are offered, students should take these opportunities to engage in preparedness efforts. Without student participation, university efforts at increasing preparedness will be futile. Students also must learn appropriate plans and strategies in the event of an emergency so that they may be more prepared and less reliant on others for their safety. Students are urged to obtain basic emergency supplies, develop general emergency response plans, and challenge other students to do the same.

Further, students must change their ideas about individuals who are prepared, as there seems to be an associated stigma. For instance, many students reported perceptions that high levels of preparedness were aligned with a sense of paranoia. As one way of changing student perceptions, the university's student leaders, student-athletes, and coaches could take part in preparedness efforts, making preparedness a more socially-elevated quality to possess. With these individuals taking a lead role in disaster preparedness, student perceptions can begin to change (Silvia, 2005). A cultural climate valuing preparedness will take hold only if students create associations between those they view as popular and admirable and preparedness efforts on the campus. As perceptions change, students will likely feel more motivated to become prepared and participate in university efforts. Therefore, these research findings are essential for universities interested in sparking real change among their student body.

Directions for Research

Motivating students to prepare will facilitate better outcomes in the event of a campus emergency; therefore, continued research on this topic is crucial among college student populations. The information generated from this qualitative study informed subsequent survey development in the area of disaster preparedness, producing better measures to assess student attitudes on the topic. In addition to targeted efforts at policy change, surveys conducted campus-wide following the focus groups have been geared toward determining student, faculty, and staff perceptions of preparedness and disaster likelihood. Staff and faculty perceptions of preparedness are also important to assess in subsequent studies in order to determine if they are prepared to lead the students who rely on them in the event of an emergency. Similar to focus group and survey studies of students, it is important to employ similar methodology with faculty and staff in order to generate useful qualitative and quantitative data. Additionally, it may be useful to analyze survey data obtained campus-wide to determine if differences exist between demographic groups on attitudes of preparedness and other opinions related to disasters, considering such variables as age, year in school, social organization affiliation (e.g., Greek life), international student status, etc. This information will help determine groups of individuals most in need of targeted training and preparedness efforts.

Future research on students' perceptions of preparedness for various disasters should continue to assess multiple disaster types and determine effective methods for informing and motivating students. Studies on preparedness should also be conducted in the absence of a recent, salient emergency to better assess and represent students' perceptions and preparedness levels accurately. Barriers to students' motivation to

prepare for an emergency should be further assessed, as well as research determining which methods are most effective in enhancing motivation to prepare. Research should also examine the most effective ways to increase knowledge about disaster preparedness, as this study and others (Lovekamp & McMahon, 2011; McGee & Gow, 2012; Seo et al., 2012) suggest students are generally lacking in this area.

Study Limitations and Strengths

While the current findings are important, generating directions for research, several limitations exist. Though the sample was representative of the university's larger study body in many respects, females were overrepresented. Levels of fear and preparedness relating to disasters may vary by sex (Ratti, 2010), and also may vary by the type of disaster. For such reasons, it will be important to examine potential sex differences in future studies.

Within groups, conformity may have also influenced responses. Individuals belonging to a particular focus group may have found it difficult to speak against the general consensus of the other participants, although the use of a moderator, ground rules, a comfortable atmosphere conducive to discussion, and multiple focus groups for each topic likely lessened this potential limitation. Moderators worked to solicit responses from participants, and also worked to ensure that no participant dominated a group. In such a fashion, the goal was to achieve a balanced discussion of these important issues.

While there are a number of limitations to this study, there are also several strengths to the effort, which enhance the investigation's utility to the disaster preparedness literature. For instance, this study expanded upon previous research by integrating multiple types of disasters into the methodology. Students discussed topics

ranging from natural disasters, to incidents of mass violence, to disease outbreaks. This allowed for more general discussion and an assessment of the students' and the university's strengths and weaknesses in preparedness across a range of event types. Furthermore, unlike most previous studies on emergency preparedness among college students, this study was not conducted in the aftermath of a campus emergency; because of this, the perceptions and attitudes toward preparedness expressed in the focus groups may reflect students' views in the absence of a recent, salient emergency (Becker et al., 2012; Powell et al., 2012). Furthermore, the sample size was relatively large compared to previous qualitative studies on college students' emergency preparedness (e.g., Becker et al., 2013; McGee & Gow, 2012; Mitchell et al., 2014). Our findings corroborate previous researching suggesting that preparedness is critical for college student populations, as these individuals are at a high risk for an emergency and lack the preparedness knowledge to effective deal with a disaster. This study provides a useful step toward the development of increasingly effective policies at universities and enhanced motivation among students to prepare for disasters.

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Appendix A

Discussion Questions for Natural Disaster Groups

Moderator: "We will now ask questions regarding disaster preparedness. As you answer these questions we would like you to refer to natural disasters such as tornados, hurricanes, earthquakes, fires, and blizzards/ice storms."

Participants' barriers and motivations to be concerned and prepared.

1. When you think about disaster preparedness, what comes to mind? (refer back to survey question 10)
2. Are students thinking about disaster preparedness and if so, to what degree?
3. When you think about a person who is concerned with/thinking about disaster preparedness, what types of qualities or characteristics do you think he or she has?
    a. When you think about students who are not concerned with/thinking about disaster preparedness, what qualities or characteristics are keeping them from preparing?
    b. For those students who are not concerned with/thinking about disaster preparedness, what would make them more interested/engaged in disaster preparedness?

Training experience-training expectative

4. What do you think are some good ways of delivering information about impending disasters?
    a. How should messages be worded?
    b. Who should deliver messages?

Participant's perception of university readiness

5. What is the university's role regarding disaster preparedness?
6. What is your role regarding disaster preparedness?
7. How can we raise awareness of the importance of disaster preparedness at the university?
    a. What specific components should a program/training/class on disaster preparedness have for it to be effective?
8. What steps is the University taking to better prepare for disasters?
9. What steps can the University take to better prepare for disasters?
    a. Prioritize a list of steps the University can take.
        i. Provide required disaster preparedness trainings each semester.
        ii. Frequent, mandatory weather drills.
        iii. Send information through UMToday emails.
        iv. Send text messages about disaster preparedness.

v. Hand out informational flyers in front of the student union.
vi. Hang up informational posters about disaster preparedness in buildings on campus.
vii. Show videos on what to do in a disaster situation.

Final Question:

Participants will complete this question individually on a blank sheet of paper:

Moderator: "Please indicate any questions, concerns, or comments relevant to the topic of this focus group."

Appendix B

Discussion Questions for School Shootings-Terrorist Attacks-Pandemics

Moderator: "We will now ask questions regarding disaster preparedness. As you answer these questions we would like you to refer to such events as school shootings, terrorist attacks, and pandemics."

Participants' barriers and motivations to be concerned and prepared.

1. When you think about disaster preparedness, what comes to mind? (refer back to survey question 10)
2. Are students thinking about disaster preparedness and if so, to what degree?
3. When you think about a person who is concerned with/thinking about disaster preparedness, what types of qualities or characteristics do you think he or she has?
    a. When you think about students who are not concerned with/thinking about disaster preparedness, what qualities or characteristics are keeping them from preparing?
    b. For those students who are not concerned with/thinking about disaster preparedness, what would make them more interested/engaged in disaster preparedness?

Training experience-training expectative

4. What do you think are some good ways of delivering information about impending disasters?
    a. How should messages be worded?
    b. Who should deliver messages?

Participant's perception of university readiness

5. What is the university's role regarding disaster preparedness?
6. What is your role regarding disaster preparedness?
7. How can we raise awareness of the importance of disaster preparedness at the university?
    a. What specific components should a program/training/class on disaster preparedness have for it to be effective?
8. What steps is the University taking to better prepare for disasters?
    a. Have you seen the 4-minute school shooting video made by the University and available on the University's web site? What did you think about it?
9. What steps can the University take to better prepare for disasters?
    a. Prioritize a list of steps the University can take.
        i. Provide required disaster preparedness trainings each semester.
        ii. Frequent, mandatory drills.

iii. Send information through UMToday emails.
iv. Send text messages about disaster preparedness.
v. Hand out informational flyers in front of the student union.
vi. Hang up informational posters about disaster preparedness in buildings on campus.
vii. Show videos on what to do in a disaster situation.

Final Question:

Participants will complete this question individually on a blank sheet of paper:

Moderator: "Please indicate any questions, concerns, or comments relevant to the topic of this focus group."

Appendix C

Discussion Questions for Survey Results Focus Groups

Moderator: "We will now show you some data from a disaster preparedness survey we conducted this past fall. We want to know what you think of this survey and the results."

After results are presented (see attachment for results of the fall 2012 survey that will be discussed):

1. Were any of the results surprising? What did you find surprising? Why did the results surprise you?
2. Are there any other questions that the survey should ask about? What else would you like to know from the survey?
3. Why do you think students in general are not very concerned about the occurrence of disaster situations?
4. When you think about a person who is concerned with/thinking about disaster preparedness, what types of qualities or characteristics do you think he or she has?
    a. When you think about students who are not concerned with/thinking about disaster preparedness, what qualities or characteristics are keeping them from preparing?
    b. For those students who are not concerned with/thinking about disaster preparedness, what would make them more interested/engaged in disaster preparedness?
5. What do you think are some good ways of delivering information about impending disasters?
    a. How should messages be worded?
    b. Who should deliver messages?
6. What is the university's role regarding disaster preparedness?
7. What is your role regarding disaster preparedness?
8. How can we raise awareness of the importance of disaster preparedness at the university?
    a. What specific components should a program/training/class on disaster preparedness have for it to be effective?
9. What steps is the University taking to better prepare for disasters?
10. What steps can the University take to better prepare for disasters?
    a. Prioritize a list of steps the University can take.
        i. Provide required disaster preparedness trainings each semester.
        ii. Frequent, mandatory weather drills.
        iii. Send information through UMToday emails.
        iv. Send text messages about disaster preparedness.
        v. Hand out informational flyers in front of the student union.

vi. Hang up informational posters about disaster preparedness in buildings on campus.
vii. Show videos on what to do in a disaster situation.

Final Question:

Participants will complete this question individually on a blank sheet of paper:

Moderator: "Please indicate any questions, concerns, or comments relevant to the topic of this focus group."